

Amendments to the Claims:

1. (Currently amended) A method of reducing pathogenicity of a fungus that produces fumonisin, comprising:
 - a) stably integrating into the genome of a plant cell a primary first nucleotide sequence operably linked to a first promoter active in said plant cell, wherein said primary first nucleotide sequence comprising at least one sequence has at least 95% sequence identity to the sequence set forth in SEQ ID NO: 16, 18, 20, 22, 24, 26, 28, 30, or 32 and encodes a polypeptide having amine oxidase activity; selected from the group consisting of
 - b) optionally stably integrating into the genome of said plant cell a second nucleotide sequence operably linked to a promoter active in said plant cell, wherein said second nucleotide sequence a sequence encoding has at least 95% sequence identity to the sequence set forth in SEQ ID NO: 12 or 14 and encodes a polypeptide having fumonisin esterase activity; and
 - a sequence encoding a polypeptide having amine oxidase activity;

and,

 - b) c) stably integrating into the genome of said plant cell a secondary third nucleotide sequence operably linked to a second promoter active in said plant cell, wherein said secondary third nucleotide sequence has at least 90% 95% identity to the sequence set forth in SEQ ID NO: 2, 4, 7, or 10, and wherein said sequence encodes a polypeptide having fumonisin detoxification activity.
2. (Currently amended) The method of claim 1, wherein said primary second nucleotide sequence comprises the sequence set forth in SEQ ID NO: 12 or 14 encoding a polypeptide having fumonisin esterase activity is ESP1 or BEST1.
3. (Currently amended) The method of claim 1, wherein said primary third nucleotide sequence comprises the sequence set forth in SEQ ID NO: 2, 4, 7, or 10 encoding a polypeptide having amine oxidase activity is an amino polyolamine oxidase.

4. (Currently amended) The method of claim 1, wherein ~~the primary said first nucleotide sequence stably incorporated into the plant cell comprises the sequence set forth in SEQ ID NO: 16, 18, 20, 22, 24, 26, 28, 30, or 32. comprises the sequence encoding a polypeptide having fumonisin esterase activity and the sequence encoding a polypeptide having amino oxidase activity.~~
5. (Original) The method of claim 1, wherein said plant is a monocot.
6. (Original) The method of claim 5, wherein said monocot is maize.
7. (Original) The method of claim 1, wherein said plant is a dicot.
8. (Currently amended) The method of claim 1, wherein ~~at least one of~~ said first promoter and ~~said second promoter~~ is an inducible promoter.
9. (Currently amended) The method of claim 8 further comprising inducing expression of ~~said first primary and said secondary nucleotide sequences~~ sequence for a time sufficient to reduce pathogenicity of said fungus.
10. (Currently amended) A plant having stably integrating integrated into its genome:
a) a primary first nucleotide sequence operably linked to a promoter active in said plant, wherein said primary first nucleotide sequence ~~comprising at least one nucleotide sequence has at least 95% sequence identity to the sequence set forth in SEQ ID NO: 16, 18, 20, 22, 24, 26, 28, 30, or 32 and encodes a polypeptide having amine oxidase activity; selected from the group consisting of~~
b) optionally, a second nucleotide sequence operably linked to a promoter active in said plant, wherein said second nucleotide sequence has at least 95% sequence identity to the sequence set forth in SEQ ID NO: 12 or 14 and encodes encoding a polypeptide

having fumonisin esterase activity or a sequence encoding a polypeptide having amine oxidase activity; and,

b) c) a secondary third nucleotide sequence operably linked to a promoter active in said plant, wherein said secondary third nucleotide sequence has at least 90% 95% identity to the sequence set forth in SEQ ID NO: 2, 4, 7, or 10, and wherein said sequence encodes a polypeptide having fumonisin detoxification activity.

11. (Currently amended) The plant of claim 10, wherein said primary second nucleotide sequence is set forth in SEQ ID NO: 12 or 14 encoding a polypeptide having fumonisin esterase activity is ESP1 or BEST1.

12. (Currently amended) The plant of claim 10, wherein said primary first nucleotide sequence encodes encoding a polypeptide having amine oxidase activity is an amino polyolamine oxidase the sequence set forth in SEQ ID NO: 17, 19, 21, 23, 25, 27, 29, 31, or 33.

13. (Currently amended) The plant of claim 10, wherein the primary said first nucleotide sequence stably incorporated into the plant comprises the sequence set forth in SEQ ID NO: 16, 18, 20, 22, 24, 26, 28, 30, or 32. cell comprises a sequence encoding a polypeptide having fumonisin esterase activity and a sequence encoding a polypeptide having amino oxidase activity.

14. (Original) The plant of claim 10, wherein said plant is a monocot.

15. (Original) The plant of claim 14, wherein said monocot is maize.

16. (Original) The plant of claim 10, wherein said plant is a dicot.

17. (Previously amended) Transformed seed of the plant of claim 10.

18. (Currently amended) A plant cell having stably integrating into its genome:
- a) a primary first nucleotide sequence operably linked to a promoter active in said plant cell, wherein said primary first nucleotide sequence comprising at least one nucleotide sequence has at least 95% sequence identity to the sequence set forth in SEQ ID NO: 16, 18, 20, 22, 24, 26, 28, 30, or 32 and encodes a polypeptide having amine oxidase activity; selected from the group consisting of
 - b) optionally, a second nucleotide sequence operably linked to a promoter active in said plant cell, wherein said second nucleotide sequence has at least 95% sequence identity to the sequence set forth in SEQ ID NO: 12 or 14 and encodes a polypeptide having fumonisin esterase activity or a sequence encoding a polypeptide having amine oxidase activity; and,
 - c) a secondary third nucleotide sequence operably linked to a promoter active in said plant cell, wherein said secondary third nucleotide sequence has at least 90% 95% identity to the sequence set forth in SEQ ID NO: 2, 4, 7, or 10 and wherein said sequence encodes a polypeptide having fumonisin detoxification activity.

19. (Currently amended) A method of reducing pathogenicity of a fungus that produces fumonisin, comprising stably integrating into the genome of a plant cell:

- a) a primary first nucleotide sequence operably linked to a promoter active in said plant cell, wherein said primary first nucleotide sequence comprising at least one nucleotide sequence encodes a polypeptide having at least 95% sequence identity to the sequence set forth in SEQ ID NO: 17, 19, 21, 23, 25, 27, 29, 31, or 33 and having amine oxidase activity; selected from the group consisting of
 - b) optionally, a second nucleotide sequence operably linked to a promoter active in said plant cell, wherein said second nucleotide sequence encodes a polypeptide having at least 95% sequence identity to the sequence set forth in SEQ ID NO: 13 or 15 and encoding a polypeptide having fumonisin esterase activity or a sequence encoding a polypeptide having amine oxidase activity; and,

b) c) a secondary third nucleotide sequence operably linked to a promoter active in said plant cell, wherein said secondary third nucleotide sequence comprises at least one sequence selected from the group consisting of a nucleotide encodes a polypeptide having at least 95% sequence identity to the sequence set forth in one of SEQ ID NO: 3, 5, 8, or 10 2, 4, 7, and 10, and having fumonisin detoxification activity.

20. (Currently amended) A plant having stably integrating into its genome
a) a primary first nucleotide sequence operably linked to a promoter active in said plant cell, wherein said primary first nucleotide sequence comprising at least one nucleotide sequence encodes a polypeptide having at least 95% sequence identity to the sequence set forth in SEQ ID NO: 17, 19, 21, 23, 25, 27, 29, 31, or 33 and having amine oxidase activity; selected from the group consisting of

b) optionally, a second nucleotide sequence operably linked to a promoter active in said plant cell, wherein said second nucleotide sequence encodes a polypeptide having at least 95% sequence identity to the sequence set forth in SEQ ID NO: 13 or 15 and encoding a polypeptide having fumonisin esterase activity or a sequence encoding a polypeptide having amine oxidase activity; and,

b) c) a secondary third nucleotide sequence operably linked to a promoter active in said plant cell, wherein said secondary third nucleotide sequence comprises at least one sequence selected from the group consisting of a nucleotide encodes a polypeptide having at least 95% sequence identity to the sequence set forth in one of SEQ ID NO: 2, 4, 7, and 10 3, 5, 8, and or 11 and having fumonisin detoxification activity.

21. (Currently amended) The method of claim 1, wherein said secondary third nucleotide sequence has at least 95% 98% identity to the sequence set forth in SEQ ID NO: 2, 4, 7, or 10.

22. (Currently amended) The method of claim 1, wherein said secondary third nucleotide sequence encodes the polypeptide set forth in SEQ ID NO: 3, 5, 8, or 11.

23. (Currently amended) The plant cell of claim 10 18, wherein said secondary first nucleotide sequence ~~has at least 95% identity to the sequence is~~ set forth in SEQ ID NO: 2, 4, 7, or 10 16, 18, 20, 22, 24, 26, 28, 30, or 32.

24. (Currently amended) The plant of claim 10, wherein said secondary third nucleotide sequence encodes the polypeptide set forth in SEQ ID NO: 3, 5, 8, or 11.

25. (Currently amended) The plant of claim 10, wherein said secondary third nucleotide sequence is the sequence set forth in SEQ ID NO: 2, 4, 7, or 10.

26. (Currently amended) The plant cell of claim 18, wherein said first nucleotide sequence has at least 98% sequence identity to the sequence set forth in SEQ ID NO: 16, 18, 20, 22, 24, 26, 28, 30, or 32, said second nucleotide sequence has at least 98% sequence identity to the sequence set forth in SEQ ID NO: 12 or 14, and said secondary third nucleotide sequence has at least 95% 98% identity to the sequence set forth in SEQ ID NO: 2, 4, 7, or 10.

27. (Currently amended) The plant cell of claim 18, wherein said secondary third nucleotide sequence encodes the polypeptide set forth in SEQ ID NO: 3, 5, 8, or 11.

28. (Currently amended) The plant cell of claim 18, wherein said first nucleotide sequence encodes a polypeptide having at least 95% sequence identity to the sequence set forth in SEQ ID NO: 17, 19, 21, 23, 25, 27, 29, 31, or 33, said second nucleotide sequence encodes a polypeptide having at least 95% sequence identity to the sequence set forth in SEQ ID NO: 13 or 15, and said secondary third nucleotide sequence is encodes a polypeptide having at least 95% sequence identity to the sequence set forth in SEQ ID NO: 2, 4, 7, or 10 3, 5, 8, or 11.

29. (Currently amended) The method of claim 8 1, wherein said first nucleotide sequence encodes a polypeptide having the sequence set forth in SEQ ID NO: 13 or 15, said

second nucleotide sequence encodes a polypeptide having the sequence set forth in SEQ ID NO: 17, 19, 21, 23, 25, 27, 29, 31, or 33, and said third nucleotide sequence encodes a polypeptide having the sequence set forth in SEQ ID NO: 3, 5, 8, or 11 first promoter and said second promoter are the same promoter.

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30. (Currently amended) The method plant cell of claim +18, wherein said primary first nucleotide sequence comprises at least one sequence having encodes a polypeptide comprising the at least 95% sequence identity to the sequence set forth in SEQ ID NO: 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, or 32 17, 19, 21, 23, 25, 27, 29, 31, or 33, said second nucleotide sequence encodes a polypeptide comprising the sequence set forth in SEQ ID NO: 13 or 15, and said third nucleotide sequence encodes a polypeptide comprising the sequence set forth in SEQ ID NO: 3, 5, 8, or 11.

31. (Currently amended) The method plant cell of claim + 18, wherein said primary third nucleotide sequence comprises at least one sequence having is set forth in SEQ ID NO: 2, 4, 7, or 10 at least 90% sequence identity to the sequence set forth in SEQ ID NO: 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, or 32.

32. (Currently amended) The plant of claim 10, wherein said primary first nucleotide sequence comprises at least one sequence having encodes a polypeptide comprising the sequence set forth in at least 95% sequence identity to the sequence set forth in SEQ ID NO: 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, or 32 17, 19, 21, 23, 25, 27, 29, 31, or 33, said second nucleotide sequence encodes a polypeptide comprising the sequence set forth in SEQ ID NO: 13 or 15, and said third nucleotide sequence encodes a polypeptide comprising the sequence set forth in SEQ ID NO: 3, 5, 8, or 11.

33. (Currently amended) The plant cell of claim 10 18, wherein said primary second nucleotide sequence comprises at least one sequence having at least 90% sequence identity to the sequence is set forth in SEQ ID NO: 12, or 14, 16, 18, 20, 22, 24, 26, 28, 30, or 32.